

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/002399

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61K/06

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| P, X       | WO 03/028677 A (UNILEVER PLC ;LEVER HINDUSTAN LTD (IN); UNILEVER NV (NL))<br>10 April 2003 (2003-04-10)<br>page 39, line 4-26; claim 1; examples<br>2-4,10,13; table 4<br>page 4, line 19-24<br>--- | 1-13                  |
| X          | US 6 350 439 B1 (DUPUIS CHRISTINE)<br>26 February 2002 (2002-02-26)<br>column 3, line 8-14; claims 1,30,31;<br>examples 1-3<br>---  | 1-13                  |
| X          | US 5 980 876 A (PEFFLY MAJORIE MOSSMAN)<br>9 November 1999 (1999-11-09)<br>column 13, line 47-49; claim 1; examples<br>I-XIII<br>---  | 1-13                  |
|            | -/-   |                       |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the International search

14 May 2004

Date of mailing of the International search report

28/05/2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|----------|---|-----------------------|
| X        | US 6 248 316 B1 (PEFFLY MARJORIE MOSSMAN ET AL) 19 June 2001 (2001-06-19)<br>column 8, line 58-62<br>column 12, line 32-63; claim 1; examples 1-14<br>---   | 1-13                  |
| X        | EP 0 412 704 A (PROCTER & GAMBLE) 13 February 1991 (1991-02-13)<br>cited in the application<br>page 8, line 14-18; claim 1; examples V,VII,XI,XIV<br>page 2, line 26-29<br>page 5, line 11,12<br>---  | 1-13                  |
| X        | US 5 166 276 A (KAWAGUCHI SIGEOKI ET AL) 24 November 1992 (1992-11-24)<br>cited in the application<br>column 9, line 10-17; claim 1; examples 4,6,7,9<br>column 1, line 15<br>column 2, line 9<br>--- | 1-13                  |
| X        | US 5 021 477 A (GARBE JAMES E ET AL) 4 June 1991 (1991-06-04)<br>column 3, line 41 -column 4, line 15<br>column 7, line 67,68<br>column 10, line 13-20<br>column 12, line 43; claim 1<br>---          | 1-13                  |
| A        | US 4 693 935 A (MAZUREK MIECZYSLAW H) 15 September 1987 (1987-09-15)<br>the whole document<br>---   |                       |
| A        | US 4 728 571 A (CLEMENS LAWRENCE M ET AL) 1 March 1988 (1988-03-01)<br>the whole document<br>---  |                       |
| X        | US 5 776 444 A (MURRAY ANDREW MALCOLM ET AL) 7 July 1998 (1998-07-07)<br>column 2, line 13-15; claims 1,9; example 3<br>---   | 1-13                  |
| A        | US 6 280 765 B1 (GUERET JEAN-LOUIS H) 28 August 2001 (2001-08-28)<br>column 6, line 26-30,55-59<br>---  | 1                     |
| X        | US 5 330 747 A (KRZYSIK DUANE G) 19 July 1994 (1994-07-19)<br>column 2, line 55<br>column 3, line 30-33<br>column 6, line 5,6; claim 1; examples I-F,IV-A<br>---                                      | 1-13                  |
|          |   | -/-                   |

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | US 2002/018790 A1 (MOTLEY CURTIS BOBBY ET AL) 14 February 2002 (2002-02-14)<br>paragraphs '0034!, '0116!; examples IX, XIX<br>----  | 1-13                  |
| X          | US 2002/018791 A1 (MOTLEY CURTIS BOBBY ET AL) 14 February 2002 (2002-02-14)<br>paragraphs '0023!, '0089!; examples X, XVIII<br>----   | 1-13                  |
| X          | PATENT ABSTRACTS OF JAPAN<br>vol. 1998, no. 03,<br>27 February 1998 (1998-02-27)<br>-& JP 09 301825 A (KANEBO LTD),<br>25 November 1997 (1997-11-25)<br>paragraphs '0011, 22!; examples<br>abstract; claim 2<br>----- | 1-13                  |

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/EP2004/002399

| Patent document cited in search report |    | Publication date |  | Patent family member(s)  |  | Publication date   |
|--|----|------------------|--|--|--|--|
| WO 03028677                            | A  | 10-04-2003       | US<br>WO   | 2003091523 A1<br>03028677 A1   |  | 15-05-2003<br>10-04-2003   |
| US 6350439                             | B1 | 26-02-2002       | FR<br>BR<br>CA<br>EP<br>WO<br>JP<br>JP<br>PL<br>RU<br>US   | 2740032 A1<br>9611018 A<br>2232429 A1<br>0855897 A1<br>9714395 A1<br>11500746 T<br>3112687 B2<br>326299 A1<br>2152781 C1<br>6440404 B1   |  | 25-04-1997<br>13-07-1999<br>24-04-1997<br>05-08-1998<br>24-04-1997<br>19-01-1999<br>27-11-2000<br>14-09-1998<br>20-07-2000<br>27-08-2002   |
| US 5980876                             | A  | 09-11-1999       | AT<br>AU<br>AU<br>BR<br>CA<br>CN<br>CZ<br>DE<br>DE<br>EP<br>ES<br>FI<br>HU<br>JP<br>JP<br>MX<br>NO<br>NZ<br>PT<br>SK<br>WO | 160501 T<br>674289 B2<br>2544692 A<br>9206387 A<br>2115252 A1<br>1071332 A ,B<br>9400349 A3<br>69223322 D1<br>69223322 T2<br>0600032 A1<br>2110519 T3<br>940772 A<br>67148 A2<br>2944753 B2<br>6509806 T<br>9204803 A1<br>940539 A<br>243997 A<br>100792 A<br>19494 A3<br>9303703 A2 |  | 15-12-1997<br>19-12-1996<br>16-03-1993<br>27-12-1994<br>04-03-1993<br>28-04-1993<br>18-05-1994<br>08-01-1998<br>02-07-1998<br>08-06-1994<br>16-02-1998<br>18-02-1994<br>28-02-1995<br>06-09-1999<br>02-11-1994<br>01-04-1993<br>19-04-1994<br>26-07-1995<br>30-09-1993<br>07-12-1994<br>04-03-1993 |
| US 6248316                             | B1 | 19-06-2001       | AT<br>AU<br>BR<br>CA<br>CN<br>DE<br>DE<br>EP<br>HK<br>JP<br>JP<br>WO   | 235213 T<br>7455896 A<br>9611585 A<br>2235813 A1<br>1200664 A ,B<br>69627002 D1<br>69627002 T2<br>0861064 A1<br>1015700 A1<br>10512294 T<br>3088468 B2<br>9715275 A1   |  | 15-04-2003<br>15-05-1997<br>13-07-1999<br>01-05-1997<br>02-12-1998<br>30-04-2003<br>11-03-2004<br>02-09-1998<br>21-01-2004<br>24-11-1998<br>18-09-2000<br>01-05-1997   |
| EP 0412704                             | A  | 13-02-1991       | AT<br>AU<br>AU<br>BR<br>CA<br>CN<br>DE<br>DE<br>DK   | 179323 T<br>624014 B2<br>6015890 A<br>9003860 A<br>2022467 A1<br>1049784 A ,B<br>69033073 D1<br>69033073 T2<br>412704 T3   |  | 15-05-1999<br>28-05-1992<br>07-02-1991<br>03-09-1991<br>08-02-1991<br>13-03-1991<br>02-06-1999<br>25-11-1999<br>01-11-1999   |

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/002399

| Patent document cited in search report | Publication date |            | Patent family member(s)   | Publication date   |
|--|------------------|------------|---|--|
| EP 0412704                             | A                |            | EP 0412704 A2<br>EP 0878184 A2<br>ES 2132064 T3<br>GR 3030477 T3<br>HK 1012999 A1<br>IE 902824 A1<br>JP 2944718 B2<br>JP 3128311 A<br>KR 164210 B1<br>MX 173186 B<br>TR 25185 A<br>US 5618524 A<br>US 5997853 A<br>US 5658557 A | 13-02-1991<br>18-11-1998<br>16-08-1999<br>29-10-1999<br>23-06-2000<br>27-02-1991<br>06-09-1999<br>31-05-1991<br>15-01-1999<br>07-02-1994<br>01-11-1992<br>08-04-1997<br>07-12-1999<br>19-08-1997 |
| US 5166276                             | A                | 24-11-1992 | DE 69028742 D1<br>EP 0408311 A2<br>JP 2815684 B2<br>JP 3128909 A<br>KR 148482 B1<br>US 5480634 A  | 07-11-1996<br>16-01-1991<br>27-10-1998<br>31-05-1991<br>02-11-1998<br>02-01-1996   |
| US 5021477                             | A                | 04-06-1991 | US 4981903 A<br>US RE34958 E<br>AU 5185293 A<br>AU 5918990 A<br>CA 2021570 A1<br>DE 69022800 D1<br>DE 69022800 T2<br>EP 0412770 A1<br>JP 3081311 A<br>JP 7074256 B  | 01-01-1991<br>30-05-1995<br>27-01-1994<br>07-02-1991<br>08-02-1991<br>09-11-1995<br>15-05-1996<br>13-02-1991<br>05-04-1991<br>09-08-1995   |
| US 4693935                             | A                | 15-09-1987 | AU 594151 B2<br>AU 7255287 A<br>BR 8702528 A<br>CA 1274333 A1<br>DE 3751411 D1<br>DE 3751411 T2<br>EP 0250093 A2<br>ES 2074419 T3<br>JP 2002652 C<br>JP 7033503 B<br>JP 62288676 A<br>MX 166303 B                               | 01-03-1990<br>26-11-1987<br>23-02-1988<br>18-09-1990<br>24-08-1995<br>04-04-1996<br>23-12-1987<br>16-09-1995<br>20-12-1995<br>12-04-1995<br>15-12-1987<br>29-12-1992                             |
| US 4728571                             | A                | 01-03-1988 | CA 1277875 C<br>DE 3684191 D1<br>EP 0210041 A2<br>JP 2537806 B2<br>JP 62022881 A<br>JP 8239432 A<br>KR 9509039 B1   | 18-12-1990<br>16-04-1992<br>28-01-1987<br>25-09-1996<br>31-01-1987<br>17-09-1996<br>14-08-1995   |
| US 5776444                             | A                | 07-07-1998 | AU 695227 B2<br>AU 5499896 A<br>BR 9604872 A<br>CA 2215751 A1   | 06-08-1998<br>23-10-1996<br>26-05-1998<br>10-10-1996   |

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/EP2004/002399

| Patent document cited in search report | Publication date | Patent family member(s) |          |          | Publication date |
|--|------------------|-------------------------|----------|----------|------------------|
| US 5776444                             | A                | CN                      | 1185728  | A ,B     | 24-06-1998       |
|  |                  | DE                      | 69614255 | D1       | 06-09-2001       |
|  |                  | DE                      | 69614255 | T2       | 15-11-2001       |
|  |                  | WO                      | 9631188  | A1       | 10-10-1996       |
|  |                  | EP                      | 0820266  | A1       | 28-01-1998       |
|  |                  | ES                      | 2162049  | T3       | 16-12-2001       |
|  |                  | IN                      | 186843   | A1       | 24-11-2001       |
|  |                  | JP                      | 3043816  | B2       | 22-05-2000       |
|  |                  | JP                      | 10511099 | T        | 27-10-1998       |
| US 6280765                             | B1               | 28-08-2001              | FR       | 2761889  | A1               |
|  |                  |                         | CA       | 2232616  | A1               |
|  |                  |                         | EP       | 0870498  | A1               |
|  |                  |                         | JP       | 2865659  | B2               |
|  |                  |                         | JP       | 10287559 | A                |
| US 5330747                             | A                | 19-07-1994              | DE       | 69407441 | D1               |
|  |                  |                         | DE       | 69407441 | T2               |
|  |                  |                         | EP       | 0610015  | A1               |
|  |                  |                         | ES       | 2113613  | T3               |
|  |                  |                         | JP       | 6234622  | A                |
|  |                  |                         | US       | 5451610  | A                |
|  |                  |                         | US       | 5460804  | A                |
| US 2002018790                          | A1               | 14-02-2002              | AU       | 8287701  | A                |
|  |                  |                         | WO       | 0203932  | A2               |
| US 2002018791                          | A1               | 14-02-2002              | AU       | 8049901  | A                |
|  |                  |                         | WO       | 0203933  | A2               |
| JP 09301825                            | A                | 25-11-1997              | NONE     |          |                  |